the ends **40** and **42** where the axle emerges, each end of the axle is provided with a sealing flange **56** and **58**. Flanges **56** and **58** are sized to seat against respective sealing surfaces **60** and **61** arranged at each end of the body surrounding the fluid conduit **38**. One of the flanges, for example, **56**, is preferably permanently attached to the axle, the other flange **58** being removable and held in place by a nut **62** engaging threads **64** on the support **50**. The axle has a smaller diameter than the fluid conduit providing an annular space through which the fluid can flow the entire length of the conduit. When the axle **55** is inserted in the conduit **38**, sealing flange **56** is seated against sealing surface **60** at end **40** of the body, support **50** extends from fluid conduit **38** at end **42**, and sealing flange **58** is seated against sealing surface **61** at end **42**. Nut **62** engages threads **64** and is torqued to force the sealing flanges against the sealing surfaces to effect a fluid tight seal at each end of the body. O-rings **66** and **67** may also be used between the sealing flanges and the sealing surfaces to effect the seal.

As seen in FIG. **4**, the outlet passages **44** are preferably radially oriented with respect to the outer surface **46** of the body **30**, although it is contemplated that other orientations would also be possible and practical under certain conditions. Preferably, the apertures **46** are located between teeth **34** in a region which faces hinge pins **24** (see FIG. **1**) but does not contact the belt **12** directly. Thus, a continuous stream of fluid emerges from each of the apertures **44** regardless of the relative position of an aperture to the belt. This allows the sprocket to spray at a constant pressure and avoids pressure surges which might occur if a particular aperture were blocked by contact with the belt as it traverses the sprocket.

As shown in FIG. **5**, nozzles **68** may be mounted within the fluid outlet passages **44** to control the stream of fluid from the outlet passages against the inwardly facing surface **20** of belt **12**. The nozzles can form the spray into any combination of configurations, from a concentrated jet hitting the belt with a high velocity to blast debris and residue from the belt, to a wide angle spray to soak the belt over a wide area. The nozzles can be permanently set to a particular spray regime or adjustable for maximum versatility.

An alternate embodiment for the arrangement of outlet passages **44** is shown in FIG. **7**. Instead of arranging one outlet passage at each particular cross-section along the length of body **30**, multiple outlet passages are arranged at each cross section, thereby providing a symmetrical radial spray of fluid to clean the belt **12** along the entire length of the sprocket **14**.

It is contemplated that the fluid to be sprayed from the sprocket may be a gas such as compressed air. Such a system would be practical, for example, if it is desired to prevent the accumulation of dust on the conveyor. For a conveyor used to transport cuts of meat where viscous organic matter and residue will accumulate on the belt, it is preferable that the sprocket spray a liquid such as water or a liquid detergent or other cleaning fluid to most effectively remove the organic matter from the belt.

Use of a sprocket cleaning belt according to the invention increases the efficiency of plant operations as the conveyors cleaned of debris and residue need not be taken out of service and disassembled to clean otherwise inaccessible regions such as the inwardly facing surface of the belt. The sprocket cleaning belt will also improve the sanitary condition of the conveyor as it ensures a thorough cleaning of the belt, which might not otherwise occur.

What is claimed is:

1. An endless conveyor for transporting items, said conveyor comprising:

a pair of supports for rotatably mounting said body, said outer surface following a cylindrical path upon rotation of said elongated body relative to said supports;

a fluid conduit extending lengthwise within said body from one end thereof;

fluid inlet passage communicating with said fluid conduit; and

a plurality of outlet passages extending from said fluid conduit, said passages terminating in apertures in said outer surface, said inlet passage supplying fluid under pressure to said fluid conduit and outwardly through said outlet passages and said apertures onto said inwardly facing surface of said endless conveyor.

2. An endless conveyor according to claim **1**, wherein the length of said one sprocket is substantially equal to the width of said belt.

3. An endless conveyor according to claim **2**, wherein said fluid conduit extends from said one end substantially to the other end of said body.

4. An endless conveyor according to claim **3**, wherein said outlet passages and said apertures are positioned in spaced relation lengthwise along said body.

5. An endless conveyor according to claim **1**, wherein said endless belt comprises a plurality of segments arranged side-by-side and hingedly connected to one another, said segments pivoting relative to each other when traversing around said sprockets.

6. An endless conveyor according to claim **5**, further comprising a plurality of teeth spaced circumferentially around said body and projecting radially outwardly therefrom, and a plurality of mating teeth projecting from said inwardly facing surface of said endless conveyor, said mating teeth interengaging said teeth projecting from said body and allowing said sprocket to turn without slipping relatively to said belt.

7. An endless conveyor according to claim **4**, wherein said one sprocket is an idler sprocket.

8. An endless conveyor according to claim **7**, wherein said one sprocket is positioned at one end of said conveyor.

9. An endless conveyor according to claim **4**, wherein said apertures are arranged in a row extending in a helix lengthwise along and around said cylindrical support surface.

10. An endless conveyor according to claim **6**, wherein at least one of said apertures is positioned in between two of said teeth.

11. An endless conveyor according to claim **1**, further comprising at least one nozzle fitted within one of said apertures, said nozzle controlling the spray of said fluid through said aperture.

12. An endless conveyor according to claim **11**, wherein said nozzle is oriented substantially radially with respect to the long axis of said body.

13. An endless conveyor according to claim **1**, wherein said fluid is a liquid.

14. A sprocket adapted to spray a fluid for cleaning an endless conveyor, said sprocket comprising:

an elongated body having an outer surface for support of an inwardly facing surface of said endless conveyor;

a pair of supports for rotatably mounting said body, said outer surface following a cylindrical path upon rotation of said elongated body relative to said supports;

a fluid conduit extending lengthwise within said body from one end thereof;

fluid inlet passage communicating with said fluid conduit; and

a plurality of outlet passages extending from said fluid conduit, said passages terminating in apertures between said outer surface, said inlet passage supplying fluid under pressure to said fluid conduit and outwardly through said outlet passages and said apertures onto said inwardly facing surface of said endless conveyor.

15. A sprocket according to claim **14**, wherein said fluid conduit extends substantially from said one end to the other end of said body.

16. A sprocket according to claim **15**, wherein said outlet passages and said apertures are positioned in spaced relation lengthwise along said body.

17. A sprocket according to claim **14**, wherein said outlet passages are oriented substantially radially with respect to the long axis of said body.

18. A sprocket according to claim **16**, wherein the length of said sprocket is substantially equal to the width of said conveyor.

19. A sprocket according to claim **14**, further comprising a plurality of teeth spaced circumferentially around said body and projecting radially outwardly therefrom, said teeth engaging mating teeth arranged on said inwardly facing surface of said endless conveyor allowing said sprocket to turn without slipping relatively to said conveyor.

20. A sprocket according to claim **14**, wherein said teeth extend continuously substantially along the entire length of said body.

21. A sprocket according to claim **20**, wherein said apertures are arranged in a row extending in a helix lengthwise along and around said cylindrical support surface.

22. A sprocket according to claim **19**, wherein at least one of said apertures is positioned in between two of said teeth.

23. A sprocket according to claim **14**, further comprising at least one nozzle fitted within one of said apertures, said nozzle controlling the spray of said fluid through said aperture.

24. A sprocket according to claim **14**, wherein said fluid inlet extends through one of said supports at said one end thereof, said body has a sealing surface having a hole therein sized to accept said one of said supports in mating interengagement, said one of said supports having a sealing flange extending outwardly therefrom, said sealing flange seating against said sealing surface, said sealing surface and said flange sealing said fluid conduit.

* * * * *